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THEMATIC ARTICLE

Analysis model applied to the state of the art of the administration epistemology

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Abstract

The article proposes a systematization of the epistemological paradigms already identified by research that studied the literature on administration epistemology. Such systematization is carried out through an analytical review, in which an analysis model, the result of a theoretical consortium between Ramos and Piaget, is the guiding thread. The different paradigms are analyzed according to their degree of reflexivity against the backdrop of the philosophical foundations of general epistemology. In the field of administration epistemology, it was observed that from the pioneering to the current works, the different authors defend a reflective decentring capable of generating a movement that takes the theory of organizations from the construct that Ramos calls the theory of necessity to the field of theory of possibility and beyond. Thus, the use of Platonic/Aristotelian/Cartesian archetypes by Kantian and post-Kantian archetypes was overcome. The analysis model is applied a second time to the abstracts of the last 30 theses of a graduate program in administration, defended from July 2019 to November 2022. Ten abstracts from each of the three lines of research were analyzed. In this second application, the model was adjusted with the inclusion of other theoretical and methodological aspects, now containing nine reflexivity indicators. It was demonstrated that, due to the different degrees of reflexivity, each line of research has its own characteristics in adopting theories and methods.

Keywords: Epistemology. Reflexivity. Administration..

Modelo de análise aplicado ao estado da arte da epistemologia da administração

Resumo

O artigo tem como objetivo propor uma sistematização dos paradigmas epistemológicos já identificados por pesquisas que estudaram o estado da arte da epistemologia da administração. Tal sistematização é realizada por meio de uma resenha analítica, na qual um modelo de análise, fruto de um consórcio teórico entre Alberto Guerreiro Ramos e Jean Piaget, é o fio condutor. Os diferentes paradigmas são analisados em função de seu grau de reflexividade, tendo como pano de fundo os fundamentos filosóficos da epistemologia geral. No campo da epistemologia da administração, foi observado que, dos trabalhos seminais aos atuais, os diferentes autores defendem um descentramento reflexivo capaz de gerar um movimento que leve a teoria das organizações do construto, chamada por Ramos de teoria da necessidade, para o campo da teoria da possibilidade e além, superando a utilização de arquétipos platônicos/aristotélicos/cartesianos por arquétipos kantianos e pós-kantianos. O modelo de análise é aplicado uma segunda vez, agora nos resumos das últimas 30 teses de um programa de pós-graduação em administração, defendidas de julho de 2019 a novembro de 2022. Foram analisados 10 resumos de cada uma das três linhas de pesquisa do programa. Nessa segunda aplicação, o modelo foi ajustado com a inclusão de outros aspectos teóricos e metodológicos, passando a conter 9 indicadores de reflexividade. Foi demonstrado que, em função dos diferentes graus de reflexividade, cada linha de pesquisa apresenta uma característica própria na forma de aplicar teorias e métodos.

Palavras-chave: Epistemologia. Reflexividade. Administração.

Modelo de análisis aplicado al estado del arte de la epistemología de la administración

Resumen

El artículo tiene como objetivo proponer una sistematización de los paradigmas epistemológicos ya identificados por investigaciones que estudiaron el estado del arte de la Epistemología de la Administración. Tal sistematización se realiza a través de una revisión analítica, en la que un modelo de análisis, resultado de una unión teórica entre Ramos y Piaget, es el hilo conductor. Los diferentes paradigmas se analizan según su grado de reflexividad, teniendo como telón de fondo los fundamentos filosóficos de la Epistemología General. En el campo de la Epistemología de la Administración, se observó que, desde los trabajos seminales hasta los actuales, los diferentes autores defienden un descentramiento reflexivo capaz de generar un movimiento que tome la Teoría de las Organizaciones del constructo denominado por Guerreiro Ramos como Teoría de la Necesidad, al campo de la Teoría de la Posibilidad y más allá. Superando así el uso de arquetipos platónicos/aristotélicos/cartesianos por arquetipos kantianos y poskantianos. El modelo de análisis se aplica por segunda vez, esta vez a los resúmenes de las últimas 30 tesis de un programa de posgrado en Administración, defendidas desde julio de 2019 hasta noviembre de 2022. Se analizaron diez resúmenes de cada una de las tres líneas de investigación. En esta segunda aplicación, el modelo fue ajustado con la inclusión de otros aspectos teóricos y metodológicos, conteniendo ahora nueve indicadores de reflexividad. Se demostró que, debido a los diferentes grados de reflexividad, cada línea de investigación tiene sus propias características en la forma de adoptar teorías y métodos.

Palabras clave: Epistemología. Reflexividad. Administración.

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INTRODUCTION

This work seeks to contribute to the clarification of a recurrent problem in the field of Organization Studies: the ontological point of departure. As Paes-de-Paula (2015) teaches us, one of the first dilemmas a study faces are the paradigmatic positioning of the analytical focus, which in turn, determines understanding and scientific practice.

The scientific community's interest in organization studies and the construction of a specific epistemology in the field of Administration, constitutes a consolidated and growing line of research in Brazil (Serva, 2017). As Serva points out (2014), the large number of epistemology courses in graduate programs, the establishment of epistemology as the subject of two academic divisions in the National Association of Graduate Research in Administration (Anpad), and the realization of specific conferences about this subject have created conditions which are propitious for frequent discussions of the epistemology of administration and the publication of scientific articles.

In his article "O Surgimento e o Desenvolvimento da Epistemologia da Administração (The Appearance and Development of Epistemology in Administration)", Serva (2014) conducts an analytical review of several studies regarding this subject within the international context, using the criterion of studies which employ an epistemological approach, with an emphasis on its founders. The author also analyzes studies which contribute by addressing various subareas of administration and presenting effective theoretical consistency regarding this subject.

In another article entitled "Epistemologia da Administração no Brasil: o Estado da Arte (The Epistemology of Administration in Brazil: The State of the Art)", Serva (2017) presents the current stage of epistemology in Brazil, tracing a panorama of the main dimensions which have recently been addressed by Brazilian authors.

The objective of our study is to analyze this group of works summarized by Serva (2014, 2017) through an analytical model which is the fruit of a combination of the ideas of Alberto Guerreiro Ramos and Jean Piaget, whose main categories are the concepts of reflexivity and decentration (Piaget) as well as the ideal types used by Necessity Theory and Possibility Theory (Ramos). A third category has been added to the two original categories: Relativist (or Post-Structuralist) Theory. Our data analysis was performed through a critical review. It may be observed that in the sample presented by Serva (2014, 2017), which ranges from seminal to current works regarding the epistemology of administration, various authors argue in favor of a reflective decentration which is capable of generating a movement which takes Organization Theory from the field of Necessity Theory to Possibility Theory, substituting Platonic/Aristotelean/Cartesian archetypes with Kantian and Post-Kantian archetypes.

Our analytical model has been adjusted through the inclusion of other theoretical and methodological aspects, which have resulted in 9 indicators of reflexivity which have been reapplied to the abstracts of 30 recent theses in a graduate program. Ten abstracts were analyzed for each of the program's three lines of research. In a second application, we will demonstrate that due to varying degrees of reflexivity, each line of research presents its own characteristics in terms of the way it adopts theories and methods.

THEORETICAL-METHODOLOGICAL ASPECTS

In the 1980s, the sociologist Alberto Guerreiro Ramos created Necessity Theory and Possibility Theory as a synthesis of different theoretical currents, indicating a path for the maturation of organization studies. In the text "*A Modernização em Nova Perspectiva: em Busca do Modelo de Possibilidade*" (Modernization from a New Perspective: In Search of the Model of Possibility) Ramos (1983) presented an analysis of critiques of reductionist perspectives of reality, which according to the author, are represented in theories of Platonic/Aristotelean origins.

In examining various academic works, the author verifies that they can be placed on a continuum between the poles of Necessity Theory and Possibility Theory, which are ideal types. The fundamental assumptions of the first type are based on deterministic laws, while the second type is characterized not by Platonic/Aristotelean/Cartesian archetypes, but rather Kantian and Post-Kantian archetypes.

Ramos (1983) made a classification of various authors, placing them on his continuum. Aristotle, Hegel, and Descartes, for example, are in the necessity model, while Kant, Weber, and Habermas, are in the possibility model. There are also certain authors with a theoretical-methodological ambivalence. In the words of Ramos, they have a "Hamlet complex" od "to be or not to be", with ideas that are pertinent to both theoretical camps. These cases represent a transition point, which is recurringly based more on one model than the other: "Theoretically we are forced to assume that each situation presents its own combination of these aspects" (Ramos, 1983, p. 8).

This author perceived that the social sciences were going through a phase of paradigmatic transition. According to him, during moments of transition, contradictory paradigms of scientific thinking coexist and partially overlap. Inspired by the epistemologist Thomas Kuhn, the author shared the idea that, unlike the paradigms of natural sciences which succeeded and substituted them, in the social sciences and within society, they have coexisted for a long time, until the emerging dominance of a pattern (Gutiérez & Almeida, 2013).

In the history of Western philosophy, this first transition lasted over two hundred years. One of the main philosophers of Necessity Theory was Aristotle in the 4th century B.C., who elaborated a cosmic view which organized the entire universe in concentric circles. The planet Earth was placed in the center which was composed of the elements of dirt, fire, air, and water – this was the sublunar world. Beginning with the moon, the celestial bodies were made of ether, the same element that constituted souls and ideas, and for this reason they were considered perfect, smooth, flat, and crystalline. Everything in the world had a purpose, and knowledge consisted of discovering these purposes (Aranha & Martins, 2013).

This cosmic view, with a few adaptations, was maintained until 1822, when Pope Pius VII determined that new official system was heliocentric. Before this occurred, however, two great figures were fundamental to this transition. One was Galileo Galilei who in the beginning of the 17th century observed the moon and other planets through a telescope and perceived that Aristotle was wrong. The moon was not smooth but instead had mountains, and the Earth was not the center of the cosmos. He observed the moons of Jupiter, which indicated another cosmic center. This empirical finding refuted the entire Aristotelean system and, even though this was not his intention, imploded the bases for the metaphysics which was accepted at that time. It was Immanuel Kant who reorganized the pieces in the 18th century with his archetypes, laying the foundation for the idea that knowledge is constructed and not given *a priori* (Aranha & Martins, 2013).

Returning to Ramos in terms of what he says regarding Necessity Theory, the author constructs an ideal type which had never before been fully enunciated by any contemporary theoretician or accepted explicitly by any scientist. "However, as a group of assumptions, this theory is present in most influential works about modernization and development" (Ramos, 1983, p. 18). On the other hand, the possibility model does not require an indeterminant focus, with it being essential to understand that determinism and freedom are not opposites. This is a false dilemma (Ramos, 1983). The possibility model is made up of conjectures whose power of conviction, if they can be justified by positive and controllable knowledge, does not seek the revelation of universal laws, as Ramos clarifies (1983). What characterizes Possibility Theory is the consciousness of the limits of knowing all necessary causes, as well as having the capacity to argue whether a phenomenon is possible or not, because "choosing a possibility in a given situation is making a choice within certain limits" (Ramos, 1983, p. 9).

Finally, to complete the theoretical arc, this work also incorporates Relativist Theory to broaden the continuum suggested by Ramos (1983) in the direction of a pole whose extreme is radically indeterminant and subjectivist. This model contains authors such as Nietzsche, Foucault, Latour and other post-structural and decolonial authors. In relation to Relativist Theory, this does not signify that Ramos did not know relativist and post-structuralist theories, but he did not delineate them. What these three types seek to highlight is the degree of reflective centration or decentration, and this essay is interested in reflecting on how theories of administration which deal with different paradigms can give clues in terms of this degree of reflexivity.

Continuing with our theoretical discussion, Piaget (1931) argues that the individual as well as society have gone through periods of profound reorganizations during which a new stage is reached and changes are assimilated. Each progress in cognition is associated with progress in the socialization of thinking, with a progressive decentration of the points of view of the cognizent subject. However, for this to occur, it is not enough to experience; it is necessary to rationalize the data of the action through dialogue and a confrontation of projects and ideas. This process occurs in the individual and social dimensions of human beings, which range from radical unconscious egotism to the constitution of a shared universe which is momentarily stable. New capabilities of rationality manifest themselves in language, experiential behavior, as well as one's way of thinking and placing oneself in the world.

Each stage of development corresponds to a system, followed by periods of egocentric inertia. We are self-centered, says Piaget (1931). Often without knowing or wanting, we act based on social prejudices in a series of areas and situations. On the other hand, radical decentration can be self-destructive and incapable of creating ties, understanding, and translations.

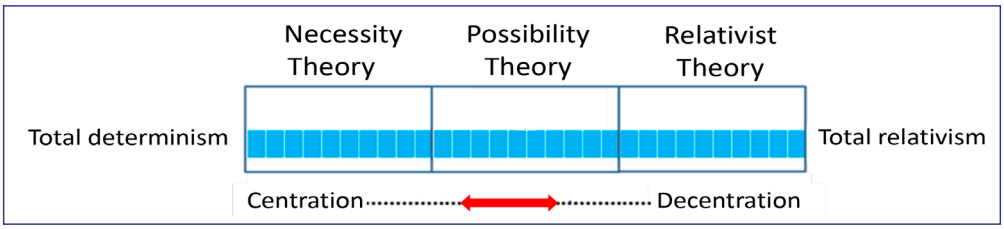
Piaget (1931) argues in favor of what he calls the "instrument of moderation", a methodology which is capable of stimulating learning by cognitive conflict, favoring new conceptual acquisitions which are capable of minimizing cognitive dissonances: "We need a new intellectual and moral attitude of understanding and cooperation, which without distancing itself from the relative, and achieves objectivity by relating to our own particular points of view" (Piaget, 1931, p. 65).

Thus, the idea argued by Piaget (1931) in his evaluation is simple and concrete. It deals with creating a method of comprehension and reciprocity, in which all humans, without losing their world view, beliefs and feelings, learn to coexist with others, utilizing techniques of cooperative learning which stimulate cognitive exchanges between groups.

Each individual should maintain his or her own perspective, as the only one that is known within, but also understand the existence of others: "What everyone understands above all is that the truth of everything is never found ready-made, but rather elaborated with effort through the coordination of these perspectives" (Piaget, 1931, p. 64). It is the renunciation of all absolute facts and the effort to understand all different coexisting views of the world that constitute the methodological bases of his instrument of moderation.

Figure 1 graphically presents an analytical model for this essay, a tool or instrument of moderation in Piaget's terminology, which displays the idea of a continuum divided into three parts which represent ideal types – Necessity, Possibility, and Relativist theories – which in turn have internal gradations.

Figure 1
Degree of Reflexivity



Source: Elaborated by the authors based on Piaget (1931) and Ramos (1986).

A CRITICAL REVIEW

In terms of a systematic reflection on nature and the foundations and construction of scientific knowledge in administration, this effort began in the end of the 1970s and the beginning of the 1980s (Serva, 2014). The first work that presents signs of an epistemological nature in administrative science with reasonable diffusion throughout academia was written by Gibson Burrel and Gareth Morgan in 1979 and entitled "Sociological Paradigms and Organizational Analysis", in which the authors, using a sociological focus, realized the typification and analysis of four paradigms which, according to them, orient scientific production in organizational analysis: functionalism, humanism, structuralism, and interpretivism (Serva, 2014). From this publication, a series of works were derived about paradigms in organizational analysis such as studies which seek to reveal the contradictions between the functionalist and critical paradigms, as well as proposed models which simultaneously employ different paradigms, which is known as metatriangulation.

Growing interest consolidated paradigmatic studies as one of the subjects frequently addressed by authors interested in the constitution of the scientific field of Administration and epistemological obstacles that need to be overcome (Serva, 2014). We can already observe in these initial works that authors identified paradigms that adhered to the three analytical models and the theoretical-methodological ambivalence of Ramos (1983). Functionalism belongs to Necessity Theory, structuralism to Possibility Theory, and interpretivism to Relativist (or Post-Structural) Theory.

After these pioneering works, the epistemology of administration came to be developed through the analysis of the production of knowledge in general in the field as well as the analysis of specific areas such as finance, marketing, strategy, and entrepreneurship, etc. investigating methodological issues, the validation of what is produced, and the social aspects of production processes (Serva, 2014).

The first book entirely devoted to the epistemology of administration according to Serva (2014) was a collection of 20 texts, which was the fruit of Ph.D. seminars at the University of Laval in Quebec. It was organized by Michel Audet and Jean-Louis Malouin and published in 1986, under the title "The Generation of Scientific Administrative Knowledge". The organizers concluded that the field of Administration is dispersed among multiple divisions which dispute epistemological and methodological options and that these attempts to exhaust diversity and its tensions only contribute to the stagnation of the field. In addition to analyzing the field of Administrative Science as a space of social process disputes, under a focus guided by Pierre Bourdieu, the authors revisit and update the classical conceptions of science and the scientific method. They also present proposals to reduce the opposition between theory and practice, introduce the subject of organizational complexity under a focus inspired by Edgar Morin, and criticize the opposition between qualitative and quantitative research methods.

The works in this collection use authors from Possibility Theory as a reference, such as Bourdieu and Morin, and argue that the theoretical foundations of administration should be shifted from their Cartesian bases without neglecting the development of quantitative methods.

Other international authors are also cited by Serva (2014). In 1990, Alain-Charles Martinet, based on Morin's complexity paradigm, argued in favor of "method openness" to overcome dichotomies and permit the evolution of administrative science, focusing efforts on the elaboration of clear, communicable, and refutable statements, as well as reflections which are capable of considering coexistence with opponents. This type of approach is typical of Possibility Theory. Also in 1990, André Micallef analyzed the epistemology of marketing, casting an eye on great historical cycles of scientific research in this area. The author sought to identify the epistemological assumptions of this scientific production, and concludes his article with a certain pessimism, because despite the recognition of the relative success of the so-called "paradigm of social interaction", this paradigm is not deemed sufficient to guarantee the rigor of scientific production, because the question of methodology remains open.

In 1996, Audet and Richard Déry opened a new front in research regarding epistemology in administration by suggesting a new form of retracing the field's historic trajectory, based on the historiography of administrative theory not as a cumulative series of approaches, but rather from the angle of the epistemological choices which were dominant during each period. In this way, they classified four great periods in this historical-epistemological examination: positivism, neo-positivism, polymorphism, and constructivism (Serva, 2014). Again, we observe that studies that analyze the theoretical development of administration from a historical perspective capture a movement towards decentration on the part of the vanguard in this field's research. However, the authors did not identify theoretical approaches belonging to Relativist Theory.

In 2000, Armand Hatchuel presented another perspective for the historiography of administration, in which the first period (1900-1939) is characterized by the imposition of classic doctrines of administration on old forms of division of work. The second period (1940-1965) was characterized by the consolidation of engineering under a neopositivist point of view, and the third period, beginning in 1965, has witnessed crises and advances in this discipline. The authors conclude that, despite the expansion of the previous periods, the field is still afflicted by epistemological issues. Here, the authors perceive what Piaget (1931) terms egocentric inertia, in which obsolete structures even though they are criticized are more consolidated than emerging structures.

In 2004, Stewart Clegg identified Cartesianism as the epistemological base for strategic management, which has led to seven fallacies which guide studies in this area. To get around this problem, the author suggests a research agenda based on subjects such as power, professional identity, non-human actors, ethics, language, and institutions, and proposes a theory grounded in strategy in practice instead of Cartesian orthodoxy (Serva, 2014). In this publication, he argues in favor of a rupture with orthodox Necessity Theory and the implementation of Possibility Theory, whose applicability is broader and more sophisticated.

Finally, Serva (2014) presents "*Épistémologie des Sciences de Gestion*" (The Epistemology of Management Sciences), a book by Martinet and Yvon Pesqueux published in 2013, which presents a critical epistemological reading of the body of organizational research, proposing an epistemological-pragmatic-ethical system which broadens the responsibilities of this field in terms of human lives, societies, and the planet.

Once again, the issue of ethics comes to the fore, this time as a system concept. The epistemology of administration begins to have characteristics which indicate a maturation: once it is capable of realizing a joint body of norms, egocentric inertia appears to give way to new consensuses.

Within the Brazilian context, Serva (2017) offers a mapping of the current stage of studies regarding the epistemology of administration, indicating dimensions that stand out in recent production regarding this specific epistemology. The author makes caveats in terms of the extent of this bibliographic research, arguing that it is a brief examination, but one which is capable of presenting a good panorama concerning this subject, given that the analyzed sample contains seminal works of the epistemology of administration and more recent works that have appeared at important scientific events.

The first reflection about this specific epistemology by a Brazilian was not published initially in Brazil. It was written by Ramos and published in 1981 in Canada in his book "The New Science of Organizations". In it he presented critiques of the administration theory that was dominant at the time and presented a substantive approach to organizations, "epistemologically based on substantive rationality, as opposed to functionalist administrative theory, which is based on instrumental rationality" (Serva, 2017, p. 741). Ramos's work was of a critical nature and was fundamental to the maturation of organization studies.

In 1993, Anna Maria Campos presented a study entitled "Contribuição para o Resgate da Relevância do Conhecimento para a Administração (A Contribution to Resurrecting the Relevance of Knowledge in Administration)", in which she revealed the incapacity of organizational theories to answer current challenges, because they are limited to a specialized mechanistic paradigm which has produced knowledge which is more and more specialized and inadequate for dealing with the complexity of contemporary problems (Serva, 2017). The author proposed revising the dominant paradigm through criticism which values subjectivity, is open to an interdisciplinary approach, does not adopt a dogmatic posture, and is committed to ethics (Serva, 2017).

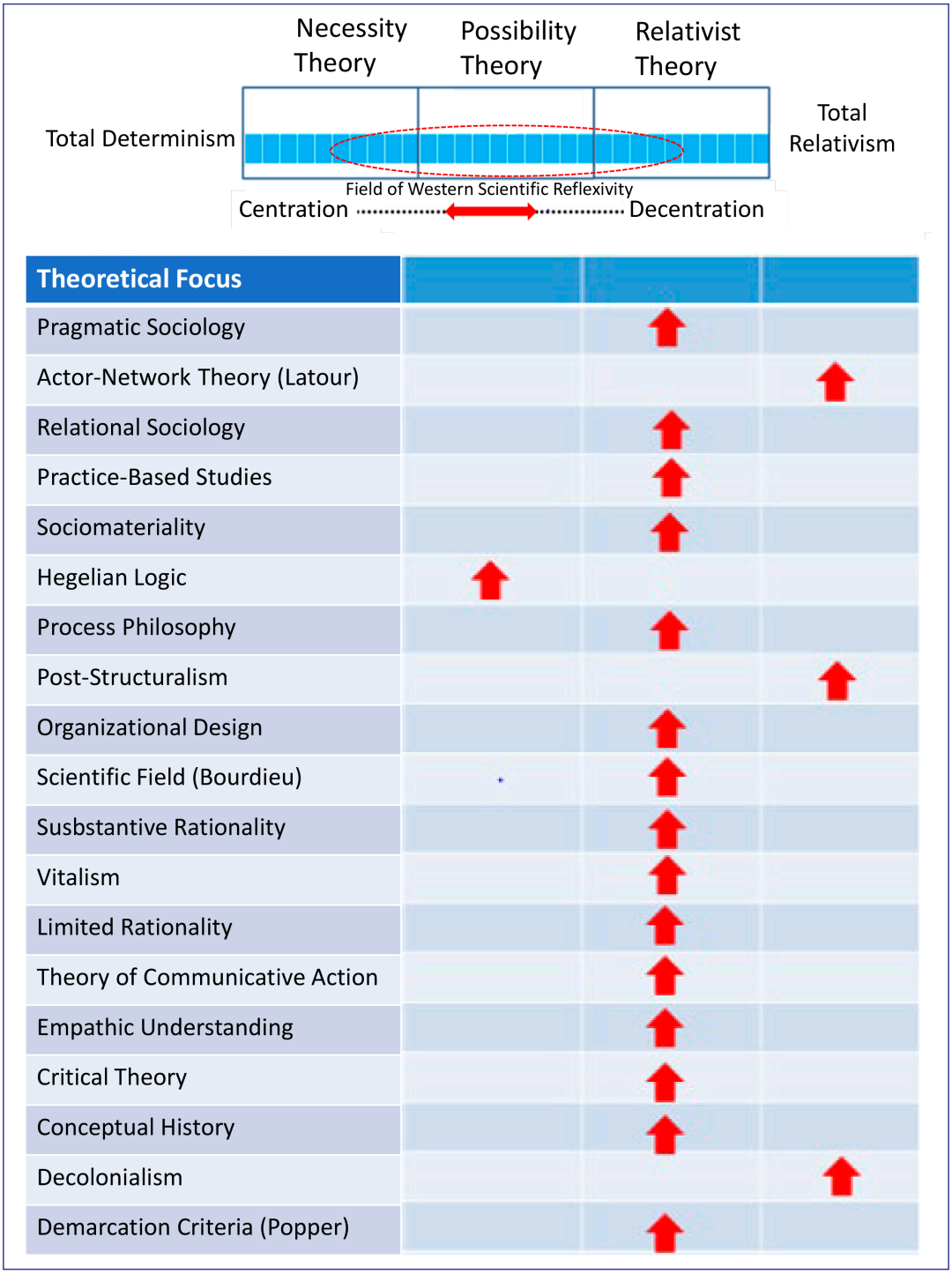
As the first work on epistemology in administration published in Brazil, the author demonstrates her knowledge of the vanguard regarding this subject. She postulates a movement towards decentration in the direction of Possibility Theory and Relativist Theory, recommends critical vigilance in regard to egocentric inertia, and is aware of the challenges which involve the perception of complexity and ethical responsibility.

In 2000, Fernando Coutinho Garcia and Marcelo Bronzo presented a work entitled "*As Bases Epistemológicas do Pensamento Administrativo Convencional e a Crítica à Teoria das Organizações*" (The Epistemological Bases of Conventional Administrative Thinking and a Critique of Organization Theory) at the first "*Encontro de Estudos Organizacionais*" (EnEO – Organization Studies Meeting). It criticized the assumptions of positivism in classical theory, the human relations school, and structuralism, proposing an interdisciplinary approach allying administration and economic theory. By directing its critical perspective at the classic theory of structuralism, we can infer that the authors based their arguments on post-structuralist foundations, which can be identified as the epistemological bases contained in Relativist Theory.

To trace the current panorama of the epistemology of administration using studies presented in EnAnpad in 2016 and 2017 as references, as well as the Fifth International Conference on the Epistemology and Sociology of Administration held in 2015, Serva (2017) selected 16 articles presented on the subject of epistemology within the divisions of Teaching and Research in Administration and Accounting, and Organization Studies of EnAnpad, as well as 12 articles from the Conference, totaling 28 works. The author identified eight dimensions that group the studies based on their similarities in terms of objectives and research interests: epistemological approaches based on pragmatism and organizational practices; the debate over epistemological and philosophical options; rationality; problems of educational institutions and teaching; public administration; history and organizations; the decolonial approach; and innovation analysis.

In Serva's analysis (2017) of 28 articles, it is possible to identify 19 theoretical focuses. Figure 2 presents these focuses within this work's model. They have been inserted into one of the three theoretical constructs due to their adherence to one of these respective theories.

Figure 2
Theoretical focuses organized in accordance with the analytical model



Source: Elaborated by the authors.

Distributing the different theories into one of the three constructs is the first step. The purpose of the next topic is to suggest two indicators which make it possible to adjust the analytical model with other degrees of reflexivity in the form of theoretical and methodological aspects. The first indicators briefly address the philosophical delineators; for the second indicators,

a scale is employed that attributes a value to the nature of the method due to this triple typification (Necessity, Possibility, and Relativist Theories). In this scale, quantitative methods tend towards centration, qualitative methods tend towards decentration, and the mixed methods tend toward the midpoint between the two.

ADJUSTMENTS TO THE ANALYTICAL MODEL

Theoretical aspects

This topic intends to justify the classification of Western scientific thinking in the analytical model, or in other words determining its limits and boundaries. To accomplish this, we present arguments that seek to define what would be the least and greatest degrees of reflexivity in science. The least are centered around the Necessity Theory portion of the scale, because thinking around this point would be related to mystical-religious thinking. By analogy, the greatest degrees of reflexivity are centered around the Relativist Theory due to decentration as well as this point's relationship with idiosyncrasies, or in other words, subjective reasons which are incapable of scientific translation, demonstration, or consensus.

In relation to efforts to understand the least degree of reflexivity, Habermas (2016) states that Weber, in his studies of religions, indicates a path to analyze the gradual transition of a society characterized by mythical rationality to religious rationality followed by the scientific rationality of a modern society. Habermas argues that Weber investigates to what extent cognitive potential, which arises from the rationalization of images of the world, becomes socially effective. According to him, Weber suggests that to measure the rationalization of an image of the world, its point of departure is the dissolution of magical thinking, which suggests a gradation based on two parameters: "One of them is the degree to which religion has discarded magic; the other is the degree of systematic unity with which religion conducts the relationship between gods and the world, and in accordance with this, religion's own ethical relationship with the world" (Habermas, 2016, p. 365). This would be a type of metric system based on moving beyond mystic consciousness "to a complex and not very clear degree of dogmatization" (Habermas, 2016 p. 365).

A second decentration movement can be illustrated by the genesis of philosophy. In his book "Philosophy in the Tragic Age of the Greeks", Nietzsche (2008) explains what makes Thales of Miletus the first Greek philosopher. To Nietzsche, Greek philosophy seems to begin with an extravagant idea: the thesis that water is the origin and center of all things. The philosopher highlights three reasons for determining this thesis and taking it seriously. In the first place because the affirmation that "everything is water" deals in some manner with the origin of things; secondly, because it does this without being a fable and is not used in a figurative sense; thirdly, because it contains, even though in a crystalline state, the thought that everything is one. Nietzsche argues that the reason cited first still leaves Thales in the community of mystics and religious figures, but the second and third reasons exclude this association, lifting him up to the stature of a thinker by nature, which is the foundation of his thesis by a metaphysical axiom of universal unity, or in other words, everything is one, and this one is water.

To Habermas (2016), the genesis of philosophy is based on a formal concept of the world, in general in the form of laws, with a degree of reflexivity that does not attribute mythological or subjective causes to phenomena, given that the metaphysical-cosmological order substitutes the former, and an epistemic I, supposedly neutral, substitutes the latter. These aspects provide the foundation for thinkers like Plato and Isaac Newton.

In terms of greater degrees of reflexivity, the anthropologist Eduardo Viveiros de Castro (2017) offers an example of what would be thinking beyond this degree. He terms this "Amerindian naturalism", and the author contrasts ideal forms of Western scientific knowledge with ideal forms of knowledge of the Amerindian world, in which, in the former, knowledge is the fruit of the accumulation of quantitative and qualitative information regarding an object or phenomenon, seeking necessary or possible causes or understanding. Thus, for knowledge to occur, one should discard the maximum of what emanates from a subject. The quality of a methodology is evaluated based on its capacity to offer equal results in terms of scientific opinions. An impersonal and neutral nature are virtues which accompany reproducibility, and Western epistemological currents tend to corroborate the idea that knowledge is the fruit of the accumulation of reproducible information about an object, and its causes do not have a correlation with what the scientist as an individual thinks about them. Knowledge discards the phenomenon in which we wish to know the wisdom of individual values, and seeks characteristics that are capable of consensus, even if they are provisional, among the initiated who dominate a certain language (Castro, 2017).

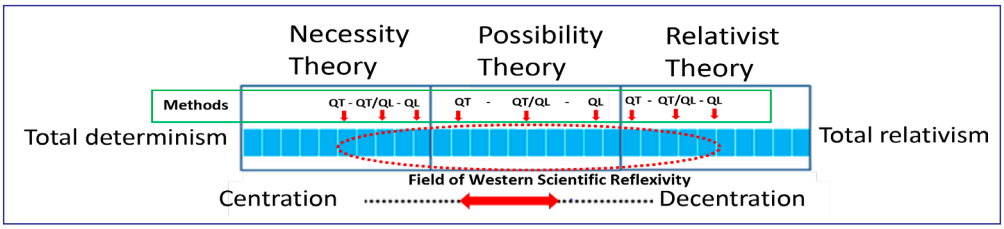
In Amerindian naturalism, the process consists of attributing a maximum of subjectivity to that which is known. That is, the more individuals manage to transform a cause into a reason or an intentional act, or the more they manage to attribute a type of personal agency acting behind the phenomena that surround them, the more they know them. There is no subject-object relationship as in Western science. There is a subject-subject relationship, given that a human aura emanates from the entire cosmos (Castro, 2017).

Methodological aspects

The second adjustment to the analytical model takes into consideration quantitative and qualitative methods or a combination of both. In terms of the use of quantitative methodologies in the field of Organization Studies, it is a historic fact that these research studies utilize epistemologies of a utilitarian and functionalist nature (Cunha & Ribeiro, 2010). However, the critical perspective of Haguette (1992) already indicates that, even in studies of a quantitative nature, data does not mechanically reveal what has been experienced. It is not autonomous or neutral, given that it trails the previous perspective of a historically located world. In turn, the application of qualitative methods should be exposed to critiques, given that in addition to being more vulnerable to subjectivity, the organizational dynamic that the researcher experiences is the fruit of a historic narrative (Cunha & Ribeiro, 2010).

In the analytical model, quantitative (QT) methods, combinations of quantitative and qualitative (QT/QL) methods, and qualitative (QL) methods are distributed taking into account the field of Western scientific reflexivity. The utilization of these three types of investigation can be an indicator of the degree of reflexivity as a function of one of the three constructs (Necessity, Possibility, and Relativist Theory) that they belong too, given their load of immanent subjectivity. Figure 3 seeks to summarize the theoretical and methodological aspects of the proposed adjustments, creating nine degrees of reflexivity.

Figure 3
Adjusted analytical model



Source: Elaborated by the authors.

APPLICATION OF THE ADJUSTED ANALYTICAL MODEL

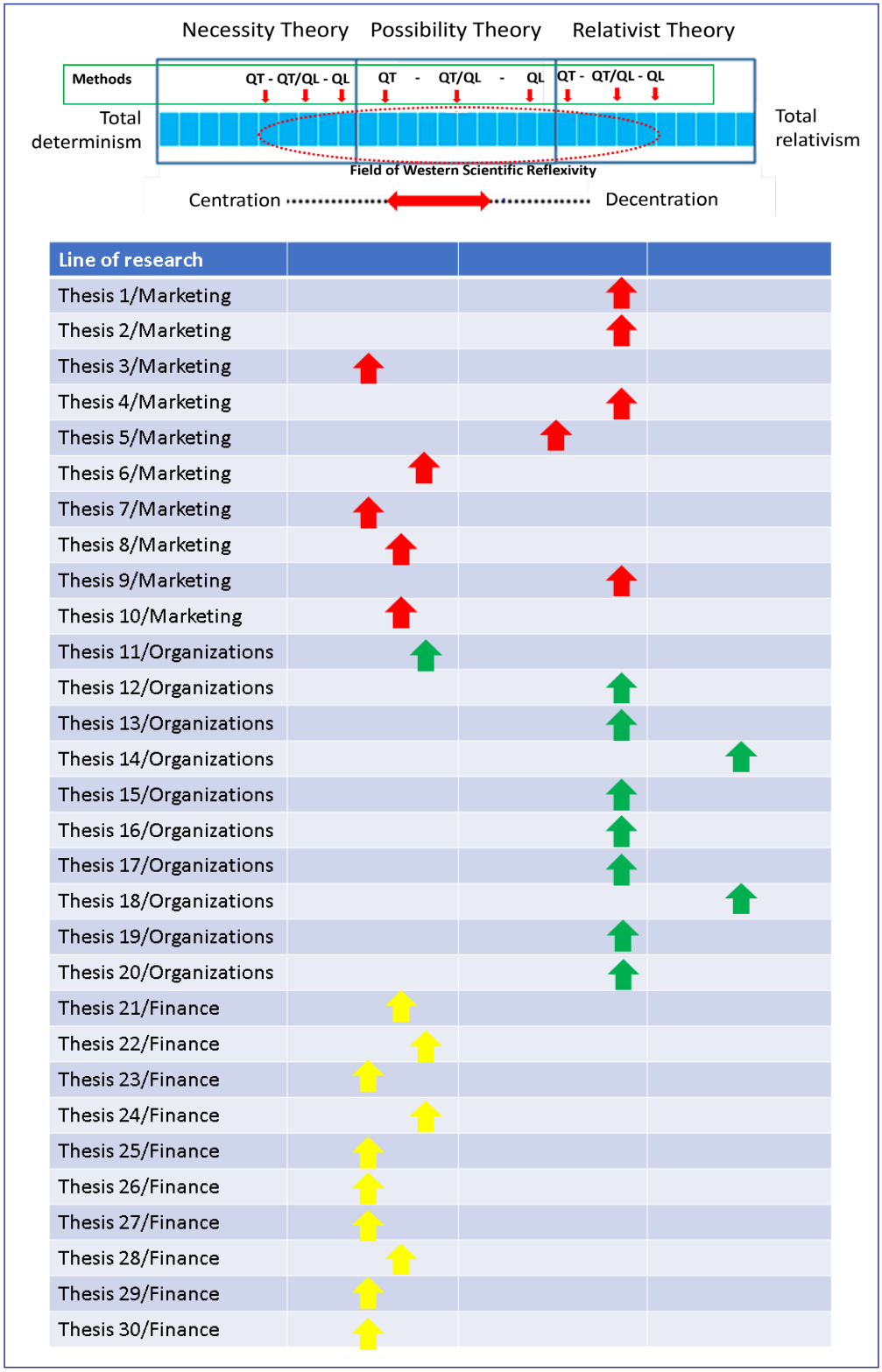
The following analysis was realized through the reading of the abstracts of 30 theses which were defended between July 2019 and November 2022 in a Graduate Program of Administration rated as Level 5 by the Brazilian Coordinating Body for the Improvement of Higher Education Personnel (Capes). Using this time period, we collected ten theses for each of the program's three lines of research: strategic management, marketing, and innovation; organizations, management, and society; and global business strategy and corporate finance.

The model enables us to observe how lines of research differ from each other in terms of theoretical and methodological options. In a descriptive manner, we can say that the marketing theses have a distribution between the Necessity and Possibility Theory constructs, with five examples for each theory, which always used quantitative methods when their analytical focus was Necessity Theory, and qualitative methods when their analytical focus was Possibility Theory – with the exception of Thesis 6 – with there being mixed methods in three cases, two of them in Necessity Theory, and one in Possibility Theory.

The theses on organization research are distributed among three types. However, the greatest concentration is in Possibility Theory (7 instances), all of which use qualitative methods, even when associated with Necessity Theory (1 instance). This line is the only one to use a focus belonging to Relativist Theory in the sample (2 instances). Finally, the theses in the line of finance are all associated with Necessity Theory and utilize quantitative methods most of the time (8 instances, with 2 of them being mixed). The other 2 instances use qualitative methods.

The lines of marketing and finance are more diverse in terms of method, with the organization line being the most diverse in terms of its epistemological foundations. Figure 4 presents the distribution of works used in the adjusted analytical model.

Figure 4
Degrees of reflexivity organized in accordance with the adjusted analytical model



Source: Elaborated by the authors.

CONCLUSION

The objective of this article has been to conduct two theoretical experiments using two different sources: studies of the state of the art of epistemology in administration analyzed by Serva (2014, 2017), and the abstracts of 30 theses for a graduate program. The first experiment addressed the theories in a broader fashion, and the second featured theoretical-methodological adjustments which allowed us to use more specific indicators. However, both require greater depth in terms of the theoretical allocation and author criteria in terms of the proposed degrees of reflexivity, as well as dealing with cases of ambivalence which place certain theories and authors in a situation of transition or hybridism.

In defense of the Hamlet complex or permanent theoretical-methodological ambivalence, Paes-de-Paula (2015) argues that this hybridism does not need to be provisional, and it is rather a constant exercise which may be the path to the maturation of the field of Organization Studies. Unlike Ramos (1983), who evaluates the transition as a hybrid until a new paradigm is prevalent, Paes-de-Paula substitutes the concept of a paradigm with the expression “sociological approaches”, contesting the thesis of the inevitable incommensurability of the social sciences and seeking to demonstrate that there are convergent paths among these diverse approaches.

Thus, we found theoretical references which use joint or hybrid approaches in the thesis abstracts such as functionalism (Necessity Theory), discourse analysis (Possibility Theory), constructivism (Possibility Theory), and Actor-Network Theory (Relativist Theory). To fully conduct this analysis, an examination of the entire theses would be necessary rather than just their abstracts. However, we believe this theoretical exercise fulfills its purpose as an initial reflection in the attempt to provide a panoramic view of the epistemology of administration and its potential application to other groups of texts, such as the production of a given scientific space within the field of Organization Studies for a given period, which makes it possible to identify its transformations and dynamics.

In terms of the differences that we have encountered, this is not a question of right or wrong; it is not a moral evaluation. The inspiration of Piaget (1931) recommends the creation of an instrument of moderation do deal with differences, seeking learning by cognitive conflict through a method of understanding and reciprocity which achieves objectivity without neglecting what is relative, and promotes cooperation, exchanges, empathy, hybridism, and development.

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Eloisa Helena de Souza Cabral: Conceptualization (Supporting); Formal analysis (Supporting); Methodology (Supporting); Supervision (Lead); Validation (Supporting); Writing - review & editing (Supporting).

DATA AVAILABILITY

The body of data that supports the results of this study is not available publicly. Details regarding the construction of the theoretical consortium of this article can be found at the link: http://repositorio.ufla.br/jspui/handle/1/46088

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